

USEPA REGION 9 LABORATORY
REPORT NARRATIVE

CASE NUMBER: R00S16
SAMPLE DELIVERY GROUP: 00263A
PROGRAM: SUPERFUND
DOCUMENT CONTROL #: ESTW-9B-4107
DATE: 02/08/01
ANALYSIS: PERCHLORATE AND TOTAL DISSOLVED SOLIDS
SAMPLE NUMBERS:

<u>SAMPLE ID</u>	<u>LABORATORY SAMPLE ID</u>
Colorado River blw Hoover Dam	AB28291
Las Vegas W. nr Henderson, NV	AB28292
Las Vegas W. nr Henderson, NV	AB28293
Las Vegas W. nr Boulder City, NV	AB28294
Las Vegas W. nr Boulder City, NV	AB28295
Colorado River Abv Imp Dam	AB28296
Colorado River Abv Imp Dam	AB28297
Colorado River Abv Imp Dam	AB28298
Colorado River @ NIB	AB28299
Colorado River @ NIB	AB28300

GENERAL COMMENTS

Ten water samples were received from the Colorado River Perchlorate Study Superfund project on 09/19/00 and 09/20/00.

The requested analyses were perchlorate by Region 9 Laboratory SOP #531 and total dissolved solids by Region 9 Laboratory SOP #461 (EPA Method 160.1). All perchlorate samples were analyzed outside the recommended 28-day holding time; all TDS samples were received and analyzed outside the required 7-day holding time.

SAMPLE RECEIPT AND PRESERVATION

No custody seals were present.

QA/QC SUMMARY

The following comment appears in the Summary of Analytical Results:

A. All results less than the quantitation limit (QL) are estimated (J).

No analytes were detected in the LRBs associated with this SDG.

No duplicate analysis was performed for TDS due to lack of sample.

The RPDs between the LFM and LFM duplicate for perchlorate duplicate were less than or equal to the QC limit of 20%.

The LFM and LFM duplicate recoveries for perchlorate were within the 75-125% QC limits.

The TDS LFB recoveries were within the 85-115% QC limits. The perchlorate LFB recovery was within the 90-110% QC limits.

Questions concerning the data can be answered by Patrick Hirata at (510) 412-2354.

GLOSSARY

Laboratory Reagent Blanks (LRB)

A laboratory reagent blank is laboratory reagent water or baked sand with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. The laboratory reagent blank is used to determine the level of contamination introduced by the laboratory during analysis.

Laboratory Fortified Matrix (LFM), Laboratory Fortified Matrix Duplicate (LFMD) and Laboratory Duplicate (LD) Analysis

The laboratory fortified matrix spike sample and laboratory duplicate analyses provide information about the effect of the sample matrix on sample preparation and measurement. Poor percent recovery (%R) results and large relative percent difference (RPD) between duplicates may indicate inconsistent laboratory technique, sample nonhomogeneity in soils, or matrix effects which may interfere with analysis.

Laboratory Fortified Blank (LFB) Analysis

The laboratory fortified blank is laboratory reagent water or baked sand with a known concentration of the analytes of interest added by the laboratory with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. Poor percent recovery (%R) results may indicate inconsistent laboratory technique.

**EPA REGION 9 LABORATORY-RICHMOND, CA
SUMMARY OF ANALYTICAL RESULTS**

Case Number: R00S16
Site: Colorado River Perchlorate Study
SDG: 00263A
Date: 02/08/01

Analysis: Perchlorate and TDS
Matrix: Water

Station Location	09421500			09419700			09419700			09419800			09419800		
Sample I.D.	Colorado River b/w Hoover Dam			Las Vegas Wash nr Henderson NV			Las Vegas Wash nr Henderson NV			Las Vegas Wash nr Boulder City NV			Las Vegas Wash nr Boulder City NV		
Lab Sample I.D.	AB28291			AB28292			AB28293			AB28294			AB28295		
Date of Collection	08/10/00			08/21/00			08/30/00			08/23/00			08/30/00		
Analyte (units)	Result	Q	Com	Result	Q	Com	Result	Q	Com	Result	Q	Com	Result	Q	Com
Perchlorate (ug/L)	8			210			23			490			58		
Total Dissolved Solids (mg/L)	560			1700			1000			1700			1500		

Com - Comments refer to the corresponding section in the report narrative for each letter.

N/A - Not Applicable.

N/R - Not Required.

Q - Refer to data qualifiers.

U - The parameter was analyzed for, but was not detected; The associated value is the sample quantitation limit, adjusted for dilution, if any.

J - The associated value is an estimated quantity.

Station Location	09429490			09429490			09429490			09522000			09522000		
Sample I.D.	Colorado River abv Imp Dam			Colorado River abv Imp Dam			Colorado River abv Imp Dam			Colorado River @ NIB			Colorado River @ NIB		
Lab Sample I.D.	AB28296			AB28297			AB28298			AB28299			AB28300		
Date of Collection	05/17/00			06/21/00			08/23/00			05/18/00			08/22/00		
Analyte (units)	Result	Q	Com	Result	Q	Com	Result	Q	Com	Result	Q	Com	Result	Q	Com
Perchlorate (ug/L)	6			7			5			4	J	A	3	J	A
Total Dissolved Solids (mg/L)	660			750			740			840			900		

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EPA REGION 9 LABORATORY-RICHMOND, CA
SUMMARY OF ANALYTICAL RESULTS

Case Number: R00S16
 Site: Colorado River Perchlorate Study
 SDG: 00263A
 Date: 02/08/01

Analysis: Perchlorate and TDS
 Matrix: Water

Station Location	N/A			N/A
Sample I.D.	Reagent			Quantitation
Lab Sample I.D.	Blank			Limit
Date of Collection	N/A			N/A
Analyte (units)	Result	Q	Com	Result
Perchlorate (ug/L)	5 U			5
Total Dissolved Solids (mg/L)	20 U			20

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